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7 gallus gall
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RESULT 2
VCLA_GOSHI
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1. 1.	Pyright. e of Bioin institut. utions as is not ra agreemen agreemen	QUENCE FROM N.A. QUENCE FROM N.A. Pyle J.B., Legocki A.B., Dure lian C.A., Dischart of control families."; e storage protein families."; e storage protein families."; FUNCTION: SEED STORAGE PROTEIN. SUBCELLULAR LOCATION: COTYLEDONARY MEN BODIES. SIMILARITY: TO OTHER 7S SEED STORAGE FOUNTCILIN, CONGLYCININ, ETC.).	PRT; ed) sequence annotatio A-GLOBULI cotton). cotton), mbryophyt ns; core ium.	PRO_DROME HSP1_PIG ALIGNMENTS	CC28_SCHPO FSA_HUMAN CAS2_CAPHI 2SS_RICCO INVO_CANFA MTG8_MOUSE MTG8_HUMAN AH12_ARAHY YM38_YEAST ERBJ_RAT
1. VICILIN C72. 63E699B29ABBADEB CRC64; Score 100; DB 1; Length Pred. No. 0.00074; ; Mismatches 10; Inde	produced atics and here are n as its c d. Usage e http://w	NS (LB_GOSHI LB_GOSHI STANDARD; PRT; 588 AA. P09801; 01-MAR-1989 (Rel. 10, Created) 01-MAR-1989 (Rel. 10, Last sequence update) 15-JUL-1999 (Rel. 38, Last annotation update) VICILIN C72 PRECURSOR (ALPHA-GLOBULIN B). Gossypium hirsutum (Upland cotton), Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae Malvales; Malvaceae; Gossypium.	MENTS	PO
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RESULT 3
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15-DEC-1998 (Rel. 37, Last annotation update)
6.5 KDA ARGININE/GLUTAMATE-RICH POLYPEPTIDE (6.5K-AGRP).
Luffa cylindrica (Smooth loofah) (Sponge gourd).
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; core eudicots; Rosidae; eurosids I;
                                                                         Kimura M., Park S.S., Sakai R., Yamasaki N., Funats "Primary structure of 6.5k-arginine/glutamate-rich the seeds of sponge gourd (Luffa cylindrica)."; Biosci. Biotechnol. Biochem. 61:984-988(1997).
                                                                                                                                                                                MEDLINE=97357433;
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                                                                                                                                                                                                     TISSUE-SEED;
                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                    Cucurbitales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fo entities requires a license agreement (See http://www.isb-sib.
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Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Sj
Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
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Ol-MAR-1989 (Rel. 10, Last septence update)
15-JUL-1999 (Rel. 38, Last annotation update)
VICILIN GC72-A PRECURSOR (ALPHA-GLOBULIN A).
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                       FUNCTION: STORAGE PROTEIN WHICH PROVIDES NITROGEN AND CARBON RESERVES DURING GERMINATION AND SEEDLING GROWTH.
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                                                                                                                                                               the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/an or send an email to license@isb-sib.ch).
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15-JUL-1998 (Rel.
15-JUL-1999 (Rel.
                                                                                     SEQUENCE
                                                                                                                                                                                                                                                    Submitted (NOV-1997)
                                                                                              CHAIN
                                                                                                                             WORMPEP;
                                                                                                                                             EMBL; Z48585; CAA88486.1;
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Rhabditidae; Peloder
                                                                                                                                                                                                                                                                                                                                                                                Caenorhabditis elegans.
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                  DDPQTDCQQCQRRCRQQESGPRQQQYCQRRC
DDPNTDCTQYTSLCSNAKYTPLLQQFCPKTC
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154 A
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47 AA;
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rinae; Caenorhabditis.
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PROTEIN ZK673.1 IN CH
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Pred. No. 0.04
i0; Mismatches
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Pred. No. 0
                                                                                     HYPOTHETICAL PROTEIN ZK673.1.; 323A02C3A2E782AB CRC64;
                                                                                                        POTENTIAL
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SOME, TO C.ELEGANS
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                                                                                     This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruces by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sorsend.anemail.tolicense@isb-sib.ch).
                                                                                                                                                                                                                                                                             MEDLINE=92129366; PubMed=1733968; Wang Y.C., Rubenstein P.A.; "Choice of 3' cleavage/polyadenylation site in beta-tropomyosin processing is differentiation-dependent in mouse BC3H1 muscle
                                                 EMBL; X58381; CAA41; PIR; S23256; S23256
                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse)
Eukaryota; Metazoa; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1995
30-MAY-2000
                          INTERPRO;
                                      SWISS-2DPAGE;
                                                                                                                                                                                                                                                                                                      cells.",
                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TROPOMYOSIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TPM1_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fungicide;
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAIZEDB; 69182;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       from maize (Zea mays L.) kernels.";
J. Biol. Chem. 267:18814-18820(1992).
-!- FUNCTION: INHIBITOR OF BOTH BACTERIAL AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-CV. B73; TISSUE-SEED;
MEDLINE-92406801; PubMed-1527010;
Duvick J.P., Rood T., Rao A.G., Marshak D.R.;
"Purification and characterization of a novel antimicrobial peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zea mays (Maize).
Eukaryota; Viridiplantae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-1996 (Rel. 34, ANTIMICROBIAL PEPTIDE
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                                                                                                                                                                                                                                                                                            Biol.
                                                                                                                                                                                            MUSCLE CELLS IS NOT CLEAR.
ALTERNATIVE PRODUCTS: SKELETAL MUSCLE BETA AND FIBROBLAST ISOFORM ARE PRODUCED BY ALTERNATIVE SPLICING.
DOMAIN: THE MOLECULE IS IN A COILED COIL STRUCTURE. THE SE EXHIBITS A PROMINENT SEVEN-RESIDUES PERIODICITY.
SIMILARITY: BELONGS TO THE TROPOMYOSIN FAMILY.
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                                                                                                                                                                                                                                                                            FUNCTION: THE
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                                                                                                                                                                                                                                                                                        Chem.
                        IPR000533;
                                                                                                                                                                                                                                                                                                                                                                                                              Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antibiotic.
33 AA; 4131
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Rel. 32, Created)
(Rel. 32, Last sequence up
(Rel. 39, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (Rel. 32, Last sequence update) (Rel. 39, Last annotation update) FIBROBLAST ISOFORM 1 (TM-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                     P46901; MOUSE
                                                               CAA41271.1; -.
Tropomyosin;
4; TROPOMYOSIN
                                                                                                                                                                                                                                                                          267:2728-2736(1992).
THE FUNCTION OF TROPOMYOSIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                            Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata;
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44.0%;
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; Poales; Poaceae; Zea.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 63.5; D
Pred. No. 0.49
6; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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P02319;
21-JUL-1986 (Rel. C
21-JUL-1986 (Rel. C
15-DEC-1998 (Rel. 3
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE=88193085; PubMed=3358932;
Johnson P.A., Pschon J.J., Yelick P.C., Palm
"Sequence homologies in the mouse protamine
EMBL;
                                                                                                                                                                                                                                                                      Schlueter G., Engel W.;
Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.

Submitted (JUL-1995) to the EMBL/GenBank/DDBJ databases.

I FUNCTION: PROTAMINES SUBSTITUTES FOR HISTONES IN THE CHROMATIN (SPERM DURING THE HARLOID PHASE OF SPERMATOGENESIS. THEY COMPACT SPERM DNA INTO A HIGHLY CONDENSED, STABLE AND INACTIVE COMPLEX.

SUBUNIT: CROSS-LINKED BY INTERCHAIN DISULFIDE BONDS AROUND THE DNA-HELIX (BY SIMILARITY).

SUBCELLULAR LOCATION: NUCLEAR.
                                                                      entities requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                      the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                                                                                                                               This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Spermatid-specific expression of protamine 1 in transgenic Proc. Natl. Acad. Sci. U.S.A. 84:5316-5319(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-87260978; PubMed=3037541;
Peschon J.J., Behringer R.R., Brinster R.L., Feschon J. Terriffo expression of protamine 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kleene K.C., Distel R.J., Hecht N.B.; "Nucleotide sequence of a cDNA clone of a cDNA clone of the companion 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update
SPERM PROTAMINE P1 (CYSTEINE-RICH PROTAMINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00326; TROPOMYOSIN; Coiled coil; Repeat; Multigene SEQUENCE 284 AA; 32944 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=C129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE=85199803; PubMed=2986684;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
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  K02926;
X07625;
                                                                                                                                                                                            SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
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84 AA; 32944 MW;
AAA39980.1;
CAA30472.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    during spermatogenesis."; sci. 513:90-101(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PubMed=3445973;
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Rodentia;
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Pred. No. 2.8;
10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
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A8C0E5780DC6F6AF CRC64;
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PROTAMINE).
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Schlueter G., Celin....
Schlueter G., Celin....
Schlung A., Adham I.M., Engel w.,
Sequence analysis of the conserved profit contains a fourth expressed gene.";
Tit contains a fourth expressed gene.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Nucleotide sequence of a cDNA encoding rat protan expression of the gene during rat spermatogenesis. Biol. Chem. Hoppe-Seyler 370:293-301(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-0CT-1996 (Rel. 34, Last annotation update)
SPERM PROTAMINE PI (CYSTEINE-RICH PROTAMINE).
                                                                            spermatozoa."
                                                                                                                  MEDLINE=76184789;
Kistler W.S., Keir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
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PROSITE; PS00048; PROTAMINE_P1; 1.
Chromosomal protein; Nucleosome core;
                                                                                                                                                                                                                               Ammer H., Henschen
                                                                                                                                                                                                                                                       MEDLINE=89207111; PubMed=3072011;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mammalia;
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                                                                                            Partial structural analysis of the
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Chim. Biophys. Acta 427:752-757(1976).

FUNCTION: PROTAMINES SUBSTITUTES FOR HISTONES IN THE CHROMATIN SPERM DURING THE HAPLOID PHASE OF SPERMATOGENESIS. THEY COMPACT SPERM DURING THE HAPLOID PHASE OF SPERMATOGENESIS.
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; M27500;
; Z47352;
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MGI:97765; PRM1.
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ll; Conser
                                                                                                                                                         OF 1-15 AND 44-50
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S03820.
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AAA39985.1;
CAA87410.1;
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37
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                                                                                                                                     PubMed=1268226;
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21
36
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BY SIMILARITY.
INTERCHAIN (WITH CYS-5)
INTERCHAIN (WITH CYS-36)
BY SIMILARITY.
B61CAF3D1BBF4978 CRC64;
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Pred. No. 1.1;
9; Mismatches
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P10275;
01-MAR-1989 (Rel. 1
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                                                                                                                                                                      Wilson E.M.,
                                                                                                                                                                                      MEDLINE=90083302; PubMed=2594783; Lubahn D.B., Brown T.R., Simental J.A.,
                                                                                                                                                                                                                                                                                                                       Lubahn D.B.,
French F.S.,
                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE=89112208;
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                     Govindan M.V.
                                       MEDLINE=90258935;
                                                          SEQUENCE FROM
                                                                                                                                                                                                                             SEQUENCE FROM
                                                                                                                                                                                                                                                                                                        "The human androgen receptor: complementary deoxyribonucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human)
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S03997;
                                                                                            uence of the intron/exon junctions of the codin
a androgen receptor gene and identification of
family with complete androgen insensitivity.";
Natl. Acad. Sci. U.S.A. 86:9534-9538(1989).
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11; Conser
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region
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S03997.
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French F.S.;
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ph D.R., Sar M.,
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(DIHYDROTESTOSTERONE RECEPTOR).
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Science [8]
                                            Patterson M.N., Hughes L.A., Gottlieb The androgen receptor gene mutations Nucleic Acids Res. 22:3560-3562(1994).
                                                                                                                                             "Androgen receptor gene mutations in muscular atrophy.";
Nature 352:77-79(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 468-919 FROM N.A.
MEDLINE-88240407; PubMed=3377788;
Trapman J., Klaassen P., Kuiper G.G.J.M.,
Faber P.W., van Rooij H.C.J., Geurts van H
Mulder E., Brinkmann A.O.;
"Cloning, structure and expression of a cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chang C., Kokontis J., Liao S.; "Molecular cloning of human and rat androgen receptors.";
                                                                                                                                                                                                                        VAKLANTS SBMA IN POLY-GLN REGION MEDLINE=91287825; PubMed=2062380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [7].
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Tilley W.D., Marcelli M., Wilson J.D.,
"Characterization and expression of a c
REVIEW ON VARIANT MEDLINE=97169385;
                                                                                                    MEDLINE=95023089;
                                                                                                                         REVIEW ON VARIANTS
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Sleddens H.F., Oostra B.A., Brin
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termination of the receptor protein
complete androgen resistance.";
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Proc. Natl. Acad. Sci. U.S.A. 85:7211-7215(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Definition of the human androgen receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chang C., Kokontis J., Liao S.; "Structural analysis of complementary DNA and amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    McPhaul M.J.;
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              VARIANTS
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 PubMed=9016528
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s J., Liao S.;
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el A., Voorhorst M.M.,
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MEDLINE=92335289; PubMed=1631125;
Newmark J.R., Hardy D.O., Tonb D.C.,
Isaacs W.B., Brown T.R., Barrack E.R.
                                                                                                      and
                                                                                                              Jenster G., Trapman J., Brinkmann A.O., Mulder E.;
"The androgen receptor in LNCap cells contains a m
ligand binding domain which affects characters."
                                                                                                                                                                                                                                                                                                                        subjects with androgen insensitive Mol. Genet. 1:497-503(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                    Sai T., van Rooij H.C., Kaufman M., Rosenfield R.L., Liao S.; "Substitution of aspartic acid-686 by histidine or asparagine human androgen receptor leads to a functionally inactive prote altered hormone-binding characteristics."; Mol. Endocrinol. 5:1562-1569(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Androgen resistance associated with a mutation of the receptor at amino acid 772 (Arg-->Cys) results from a c decreased messenger ribonucleic acid levels and impairm
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Veldscholte J., Ris-Stalpers C., Kuiper
Berrevoets C., Claassen E., van Rooij H.
                                                                                                                                                      MEDLINE=92222955; PubMed=1562539;
Veldscholte J., Berrevoets C.A., Ris-Stalpers C.,
                                                                                                                                                                                                                                    binding
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Fukumaki Y.,
                                                                                                                                                                                                                                                                       MEDLINE=92235226; PubMed=1569163;
Nakao R., Haji M., Yanase T., Ogo
                                                                                                                                                                                                                                                                                                                                       "Androgen receptor gene mutations ide subjects with androgen insensitivity
                                                                                                                                                                                                                                                                                                                                                               Hughes I.A., Patterson M.N.;
                                                                                                                                                                                                                                                                                                                                                                                          VARIANTS CAIS AND PAIS.
MEDLINE=93338440; PubMed=1307250;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VARIANT CAIS ASN-695 AND HIS-695, MEDLINE=92131007; PubMed=1775137;
                                                                                                                                                                                 VARIANT LNCAP
                                                                                                                                                                                                                  binding domain of human androgen receptor leads insensitivity syndrome.";
                                                                                                                                                                                                                                                                                                                                                                            Batch J.A., Williams D.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=91310758; PubMed=1856263; Marcelli M., Tilley W.D., Zoppi S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Functional characterization of naturally receptors from subjects with complete and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Brown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "A mutation in the ligand binding human LNCaP cells affects steroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gottlieb B., 1
"The androgen
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              Androgen receptor
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                                                                                         Steroid
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                                                                                                     response
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                                                                                      binding domain which affects sponse to antiandrogens."; roid Biochem. Mol. Biol. 41:66
                                                                                                                                                                                                         Endocrinol.
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r gene mutations in human sci. U.S.A. 89:6319-6323
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ions in human prostate cancer."; 89:6319-6323(1992).
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                                    Carter B.S., Epstein J.L.,
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ANDR_CANFA
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Best Local
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                                                                                                                                                                                                                 androgen receptor.";
Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
DNA_BIND
           DOMAIN
                                                      EMBL;
                                                                           or send an
                                                                                       entities
                                                                                                                                                                                                                                                                                                                                                                                                       Q9TT90;
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Nakao R., Yanase T., Sakai Y., Haji M., Nawata H.;
"A single amino acid substitution (Gly743 --> Val) i
binding domain of the human androgen receptor leads
                               PROSITE; PS00031; NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding;
                                                                                                                                  between
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30-MAY-2000
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VARIANT CAIS VAL-754.
MEDLINE-93372806; PubMed-8103398;
                     Zinc-finger; Steroid-binding
                                                                                                                                                                                                                                                                         "Molecular cloning
                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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m. Mol. Genet. 2:1809-1812(1993).
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                                                                                                                      European Bioinformatics Institute.
                                                                                                                                                                          SUBCELLULAR LOCATION: NUCLEAR.

BOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,

BOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING NO-TERMINAL DOMAIN,

A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.

SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
                                                                                                                                                                   NR3 SUBFAMILY.
                                                                                                                                 SWISS-PROT entry is copyright. It is produced through sen the Swiss Institute of Bioinformatics and the EN
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Motazoa; Chordata;
                                                      AF197950; AAF18084.1;
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                                                                        and this statement is not removed. Usage by and for commercial requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                                                            non-profit institutions as long
                                                                                                                                                                                                                                                                                                                  Eutheria; Carnivora; Fissipedia; Canidae;
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(Rel. 39, Last sequence update)
(Rel. 39, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
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                                                                                                                                                                                                                                                                         Castleberry T.A., Owen T.A.; and functional characterization
  545
612
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48.3%;
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 MODULATING C4-TYPE ZIN
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RESULT 11
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Best Local
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ZN_FING
DOMAIN
Receptor; Transcription regulation; Zinc-finger; Steroid-binding. DOMAIN 51 549 MODULAT DNA_BIND 551 616 C4-TYPE ZN_FING 551 571 C4-TYPE
                                                                                                    PFAM; PF00104; hormone_rec; 1.
PFAM; PF00105; zf-C4; 1.
PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00521; ANDROGENR.
                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. Mol. Evol. 47:334-342(1998).

-:- FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE ITHE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.

-:- SUBCELLULAR LOCATION: NUCLEAR.
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-i- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN.
-i- BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
-i- SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=98404153; PubMed=9732460;
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                                                                                      PROSITE; PS00031; NUCLEAR_RECEPTOR;
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Pred. No.
   MODULATING (BY SIMILARITY)
C4-TYPE ZINC FINGERS (TWO)
C4-TYPE.
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    DNA-binding; Nuclear protein;

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INTERPRO; IPR000561; -.
INTERPRO; IPR000800; -.
INTERPRO; IPR001438; -.
INTERPRO; IPR00181; -.
INTERPRO; IPR00181; -.
INTERPRO; IPR002110; -.
PEAM; PF00008; EGF; 34.
PFAM; PF000023; ank; 6.
PFAM; PF000023; ank; 6.
PFAM; PF000123; ANK_REPEAT; 4.
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STRAIN-ICR X SWISS WEBSTER;
MEDLINE-95001556; PubMed-7918097;
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HSSP; P00740;
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TISSUE SPECIFICITY: PROLIFERATING NEUROEPITHELIUM.

DEVELOPMENTAL STAGE: CNS DEVELOPMENT.

SIMILARITY: CONTAINS 3 LIN/MOTCH REPEATS.

SIMILARITY: CONTAINS 5 CDC10/SW16 REPEATS.
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LOCUS NOTCH 3 PROTEIN.
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Metazoa; Chordata; C
Uutheria; Rodentia; (
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logue mouse Notch
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Sciurognathi; Muridae; Murinae; Mus
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34 X EGF-TYPE REPEATS.
3 X LIN/NOTCH REPEATS.
6 X CDC10/SW16 REPEATS.
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RESULT 13.
NRH3_MOUSE
                                                                                                      Query Match
Best Local S
Matches 16
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Q9Z0V9;
30-MAY-2000 (Rel. 39,
30-MAY-2000 (Rel. 39,
30-MAY-2000 (Rel. 39,
0XYSTEROLS RECEPTOR I
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Submitted ()

-1- FUNCTION
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ZN_FING
ZN_FING
SEQUENCE
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PFAM; PF00105; zf-C4; 1.
PRINTS; PR00047; STROIDEINGER.
PROSITE; PS00031; NUCLEAR_RECEPTOR;
Receptor; Transcription regulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AF085745; AAD16050.1;
HSSP; P20393; 1A6Y.
INTERPRO; IPR000536; -.
INTERPRO; IPR001628; -.
                                                                                                                                                                                                                                                                                                                                                  Zinc-finger.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NY.E., HORIUCHI M., DZAU V.J.;
mitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.
FUNCTION: ORPHAN RECEPTOR. INTERACTION OF LXR ALPHA WITH
SHIFTS RXR FROM ITS ROLE AS A SILENT DNA-BINDING PARTNER
ACTIVE LIGAND-BINDING SUBUNIT IN MEDIATING RETINOID RESPO
THROUGH TARGET GENES DEFINED BY LXRES (BY SIMILARITY).
SUBCELLULAR LOCATION: NUCLEAR (POTENTIAL).
SUBCELLULAR LOCATION: NUCLEAR HORMONE RECEPTORS FAMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                European
CQECRLRKCRQ - AGMREE - - CVLSEEQIRLKKLKRQEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SWISS-PROT entry is copyright. It is produced through
en the Swiss Institute of Bioinformatics and the Bb
European Bioinformatics Institute. There are no rest
by non-profit institutions as long as its content
                                                 CQQCQ-RRCRQQESGPRQQQYC----QRRCKEICEEEEE
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19; Conser
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132
445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         equires a license agreement (See http://www.isb-sib.ch/announce/email to license@lsb-sib.ch).
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nilarity 40.0%;
Conservative
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39,
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    Last sequence update)
    Last annotation update)
    LXR-ALPHA (LIVER X RECEPTOR ALPHA) (NUCLEAR ORPHAN

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                                                                                                                                                                                                                                           M.
                                                                                                      9; Score 58; DB
9; Mismatches
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Pred. No.
                                                                                                                                                                                                                                      C4-TYPE ZINC FINGERS (TWC C4-TYPE. C4-TYPE. C4-TYPE; 1A426DF38D935731 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
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                                                                                                                                                           Length 445;
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RESULT 15
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                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                     DNA_BIND
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ZN_FING
SEQUENCE
  P34099;
01-FEB-1994
                                             KAPC_DICDI
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30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
OXYSTEROLS RECEPTOR LXR-ALPHA (LIVER X RECEPTOR ALPHA) (NUCLEAR ORPHAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PFAM; PF00104; hormone_rec; 1. PFAM; PF00105; zf-C4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zinc-finger.
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PROSITE; PS00031; NUCLEAR_RECEPTOR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INTERPRO; IPR000536; -. INTERPRO; IPR001628; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; U22662; AAA85856.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified and this statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Willy P.J., Umesono Mangelsdorf D.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=95262897; PubMed=7744246; Willy P.J., Umesono K., Ong E.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NR1H3 OR LXRA.
Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RECEPTOR LXR-ALPHA).
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                                                                                                                                                               150
                                                                                                                                                                                                                                                        Local Similarity
les 16; Conser
                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBCELLULAR LOCATION: NUCLEAR (POTENTIAL).
INDUCTION: BY 9-CIS RETINOIC ACID (9CRA).
SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THROUGH TARGET GENES DEFINED BY LXRES SUBUNIT: INTERACTS WITH RXR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          es Dev. 9:1033-1045(1995). FUNCTION: ORPHAN RECEPTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: ORPHAN RECEPTOR. INTERACTION OF LXR ALPHA WITH RXR SHIFTS RXR FROM ITS ROLE AS A SILENT DNA-BINDING PARTNER TO I ACTIVE LIGAND-BINDING SUBUNIT IN MEDIATING RETINOID RESPONSES
                                                                                                                                                             CQECRLRKCRQ -- AGMREE -- CVLSEEQIRLKKLKRQEEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBFAMILY.
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98
134
447
  (Rel.
                                                                                                                                                                                                                                                        Conservative
                                             STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                     163 C
118 C
158 C
50480 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chordata; Primates;
                                                                                                                                                                                                                                                                            23.2%;
Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR_RECEPTOR; 1.
regulation; DNA-binding; Nuclear protein;
                                                                                                                                                                                                                                                        9;
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C4-TYPE.
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Pred.
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Catarrhini; Hominidae
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                                                                                                                                                                                                                                                                                                                                                                     A227B233DB0F8C96 CRC64;
                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                            58;
                                                                                                                                                                                                                                                                                                                                                                                                                                         ZINC
                                             648
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15;
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                                             AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Usage
                                                                                                                                                               185
                                                                                                                                                                                                        42
                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                  Length 447;
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Phosphorylation.
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DOMAIN
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DOMAIN
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NP_BIND
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                                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mann S.K.O., Yonemoto W.M., Taylor S.S., Lincoll Mann S.K.O., Yonemoto W.M., Taylor S.S., Lincoll M. Dictyostelium "DdpK3, which plays essential roles during Dictyostelium encodes the catalytic subunit of CAMP-dependent protein k encodes the catalytic subunit of CAMP-dependent protein k encodes the catalytic subunit of S.A. 89:10701-10705(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=91323730; PubMed=1864510;
Buerki E., Anjard C., Scholder J.-C., Reymond C.D.;
Buerki E., Anjard C., Scholder J.-C., Reymond C.D.;
"Isolation.of two genes encoding putative protein kinases regulated
during Dictyostellum discoideum development.";
Gene 102:57-65(1991).
                                                                                                                                                                                                                                                  INTERPRO; IPR002290; -.
PFAM; PF00069; pkinase;
                                                                                                                                                                                                                                                                                DICTYDB; DD02030; PKAC. INTERPRO; IPR000719; ... INTERPRO; IPR000961; -..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -i- FUNCTION: ESSENTIAL FOR DIFFERENTIATION AND FRUIT MORPHOGENESIS.
-i- CATALYTIC ACTIVITY: ATP + A PROTEIN = ADP + A PHOSPHOPROTEIN.
-i- SUBUNIT: IN DICTYOSTELIUM THE HOLOENZYME IS A DIMER COMPOSED OF A REGULATORY (R) AND A CATALYTIC (C) SUBUNIT. IN THE PRESENCE OF CAMP IT DISSOCIATES INTO THE ACTIVE C SUBUNIT AND AN R MONOMER.
-i- DEVELOPMENTAL STAGE: CAPK ACTIVITY IS LOW IN VEGETATIVELY GROWING AMOEBAE, INCREASES DURING DEVELOPMENT OF AGGREGATION AND REACHES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=93385090; PubMed=8373760; Anjard C., Etchebehere L., Pinaud "An unusual catalytic subunit for of Dictyostelium discoideum.";
                 MOD_RES
                                                                                                                                                                                                                                                                                                                                     HSSP;
                                                                                                                                                                                                                                                                                                                                                                     EMBL; M38703;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dictyostelium discoideum (Slime mold).
Eukaryota; Dictyosteliida; Dictyostelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAMP-DEPENDENT PROTEIN PKAC OR PK2 OR PK3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1994
30-MAY-2000
                                                                                                                                                                    Transferase;
                                                                                                                                                                                    PROSITE;
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                                                                                                                                                                                                                                    PFAM; PF00433;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A MAXIMUM AT CULMINATION. SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAMP SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                   JQ1150; JQ1150.
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(Rel. 39, Last annotation update)
ENT PROTEIN KINASE CATALYTIC SUBUN
                                                                                                                                                      ); pkinase; 1.
3; pkinase_C; 1.
3; pkinase_C; 1.
0107; PROTEIN_KINASE_ATP; 1.
0108; PROTEIN_KINASE_DOM; 1.
0011; PROTEIN_KINASE_DOM; 1.
Serine/threonine-protein kinase; ATP-binding; cAMP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32:9532-9538(1993).
                                                                                                                                                                                                                                                                                                                                                                   -; NOT_ANNOTATED_CDS.
                                  223
223
250
590
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459
   74458
   MW.
                                PROTEIN KINASE.
ATP (BY SIMILARITY).
ATP (BY SIMILARITY).
BY SIMILARITY.
                                                                                                 GLN-RICH.
THR-RICH.
PHOSPHORYLATION (BY SIMILARITY).
D0F9B3A48C58D084 CRC64;
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the
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cAMP-dependent protein kinase
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Matches 12: Onservative 13: Mismatches 16: Indels 0: Gaps 0:

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